

It can be difficult to believe, but the only crops of economic importance that are native to North America are sunflower, blueberry, cranberry and the Jerusalem artichoke [...]

(It is true that the native peoples of the continent also planted potatoes, beans and corn since before the whites came from Europe, but these were brought in from Central and South America).

All other crops were imported from elsewhere, even the ones that the US currently produces in astonishing quantities, such as wheat, corn, rice and soy. "This simple fact of natural history has had important ramifications for the economic, political and social development of the United States", according to University of Wisconsin professor Jack R. Kloppenburg's book First the Seed: The Political Economy of Plant Biotechnology (2004 edition), the source of much of the information in this article.

The industrial progress of the United States rests in large part on its awesome agricultural achievements. That reality is reflected in the motto on the official seal of the US Department of Agriculture: "Agriculture is the foundation of manufacture and commerce" (http://www.nal.usda.gov/speccoll/collect/history/seal.htm). And those achievements are owed in no small part to an enormous, epic-scale endeavor of seed collection which spanned two centuries. "The introduction of plants into America has been much more than a great service, it has been an absolute imperative, a biological sine qua non upon which rests the whole complex edifice of American industrial society."

Escrito por Carmelo Ruiz-Marrero Viernes, 11 de Mayo de 2012 17:00 - Última actualización Jueves, 17 de Mayo de 2012 09:56

One of the main collaborators in the young American nation's seed acquisition efforts was its navy. Between 1838 and 1842 commander Charles Wilkes' ship traveled the Pacific with orders to find new agricultural plants, and by 1848 the ships of the East Indies Squadron were regularly collecting plants.

## According to Kloppenburg's book:

"The Perry naval expedition of 1853 is best known for forcing open the harbors of Japan to American commerce. Perry's gunboats also brought home a tremendous variety of seeds and plant materials obtained from Japan, China, Java, Mauritius and South Africa. The genetic fruits of this imperial adventure included seeds or cuttings of vegetables, barley, rice, beans, cotton, persimmon, tangerine, roses and 'three barrels of the best wheat of Cape Town' (Klose 1950: 33). Other expeditions sent plants from South America, the Mediterranean and the Caribbean."

The diplomatic corps also contributed to the effort. Consuls brought wheat from Poland, Turkey and Algeria, rye from France, sorghum from China, cotton from Calcutta and Mexico City, peppers and corn from Peru, and rice from Tokyo.

The introduction of all this diverse germplasm was what made the European colonization of North America possible and also paved the way for the USA's industrial takeoff. The planting of rice in South Carolina was owed in great part to the introduction of a variety from Madagascar in the late XVIII century. Sorghum cultivation in Kansas and Texas became a viable proposition thanks to seed samples from China and Africa. The much celebrated California citrus industry owes much to Brazilian seeds brought in by a consul in 1871. And American cattle ranching, legendary among beef producers all over the world, owes its success partly to the introduction of lespedeza grass from Japan, Russian alfalfa, and African Johnson grass.

It is not only the introduction of species, but also of numerous varieties of the same species, which enhance biodiversity and bring in favorable traits to crops. A Turkish wheat variety provided the US crop with resistance to yellow rust (Puccinia striiformis), which has resulted in an estimated \$50 million a year in savings in pest control. An aphid-resistant sorghum variety was brought in from India, which brings benefits estimated at \$12 million a year. New Scientist magazine reported in 1983 that American barley farmers save \$150 million a year thanks to a single gene from an Ethopian variety. According to the distinguished plant collector Hugh Iltis, the US tomato industry benefits from the introduction of Peruvian varieties with a high solid content to the tune of \$5 million a year. It was reported in 1986 that the University of Illinois developed soy varieties that could be saving farmers and the food industry between \$100 and \$500 million annually in processing costs, using Korean varieties as genetic raw material. The US wheat harvest, the world's third largest, has benefited from the introduction of varieties from Japan, China, Russia, Palestine, Australia, Kenya, Egypt, Bulgaria, Greece, Brazil and Uruguay. Iran, that much maligned country, has provided the United States with valuable varieties of cauliflower, onion, pea and spinach.

The words of Thomas Jefferson come to mind: "The greatest service which can be rendered to any country is to add a useful plant to its culture."

The United States helped itself to all this exuberant and bewildering variety of agricultural plants at practically no cost at all, with no compensation or even acknowledgement to the peoples who spent centuries, even millenia developing and nurturing these crops. This appropriation was legitimized with the argument that seeds are the common heritage of humanity. But when that nation is asked to share its treasure, it changes its tune. In a 1977 letter to the International Board for Plant Genetic Resources, the administrator of the US Agricultural Research Service (ARS) said that the collected seeds "would become the property of the US government". Put in different words: what's yours is mine, and what's mine is mine. In the letter, the ARS administrator openly admits that his country does not always share freely its collected seeds: "Political considerations have at times dictated exclusion of a few countries." In 1983 Canadian researcher Pat Mooney, founder of the ETC Group, reported that the US government had denied access to its seed collections to researchers from Albania, Cuba, Iran, Libya, the Soviet Union, Afghanistan and Nicaragua.

At the 1992 Earth Summit, celebrated in the Brazilian city of Rio de Janeiro, the member states of the United Nations signed the Biodiversity Convention, a global treaty that pretended, among other things, to promote the equitable distribution of the benefits of biodiversity. The United States delegation, headed by president George H. W. Bush himself, flatly refused to sign on, arguing that the invisible hand of the free market must be left unfettered to distribute these economic benefits. In other words, biodiversity to the highest bidder.

The appropriation of biodiversity reached a new level of sophistication in the post-cold war with the novel modality of imperialism known as globalization. In the 1980's, the US and its allies started a round of world trade negotiations known as the Uruguay Round. Among other things, the Round called for a global treaty on intellectual property, known by the acronym TRIPS, which would facilitate the privatization of biodiversity through patents on life. The contentious Uruguay Round, which concluded in 1994, led to the formation of the undemocratic and untransparent World Trade Organization, which has binding powers to enforce the neoliberal rules of world trade, including those pertaining to intellectual property. The TRIPS agreement is the model used in numerous bilateral trade agreements, in which biodiversity-rich countries- like those of Central and South America- are subjected to intellectual property rights provisions that force them to permit the patenting of seeds and other genetic resources.

Now, on the runup to the United Nations' Rio+20 conference, to be held in Rio de Janeiro next month, the life sciences industry, which has been the ultimate beneficiary of centuries of imperial appropriation of seeds, presents itself as champion of sustainable development. This time, these corporations advocate a pompous concept that they call the "green economy", which involves a transition from a petroleum-based economy to one based on "biomass".

But it's more of the same. Capital is never satisfied. It always wants more, and this time it's going for the remainder of the planet.

"The greatest storehouses of terrestrial and aquatic biomass are located across the global South, and they are safeguarded primarily by the peasant farmers, livestock keepers, fisher people and forest dwellers whose livelihoods depend on them", warns the ETC Group in a recent report on the green economy. "The bioeconomy will spur even greater convergence of

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corporate power and unleash the most massive resource grab in more than 500 years. The corporate 'biomassters' are poised to commodify nature on an unprecedented scale, destroy biodiversity and displace marginalized peoples."

"Many of the actors promoting the bioeconomy are also calling for market-based mechanisms to allow the quantification and then commodification of the Earth's natural resources, rebranded as 'ecosystem services' (the cycling of carbon, soil nutrients and water, for example). What we're witnessing is the birth of a greatly expanded life industry. Companies are no longer content to control the genetic material found in seeds, plants, animals, microbes and humans (i.e., all living beings); they also want to control the reproductive capacity of the planet." http://www.etcgroup.org/en/node/5296

But there is resistance, there always was. The multiple and extremely diverse cultures that hold on to the rural life and to their right to farm, the insurgent movements known for their "failure to quit", anti-patriarchal warrior princesses, campesina women who are the custodians of seed, labor unions, the unemployed, defenders of the commons, Wall Street occupiers, European indignados, Wikileakers, anonymous hackers, youths whose potential has been diminished by unemployment and student loan payments, or simply regular folks who are just plain pissed off and have good reason for it, all continuously appear and reappear despite the system's enforcers' best efforts to repress them, banish them and declare them out of order.

To quote a joint document on Rio+20 co-authored by several organizations, including Via Campesina, Friends of the Earth, the World Rainforest Movement and Oilwatch:

"Facing the enormous festivity of false solutions being prepared for Rio+20 by major corporations, banks and international financial entities, and accomplice governments, with the aim of consolidating a re-greened capitalism as the only response to the multiple crises unleashed by themselves- crises of economy, ecology, energy, food, democracy, climate, of rights, of gender, in all, a civilizational crisis- the Peoples Summit will have the challenge of galvanizing and giving visibility to the real solutions that the peoples are constructing in the countryside, forests, factories, communities, neighborhoods, schools and other places of work and coexistence."

"We therefore call upon all to get involved in this process and to movilize ourselves in each place toward Rio+20, carrying out campaigns and initiatives of debate and formation, of broadening of plattforms of strategy and joint action, of coordination, and solidarity and suppport between concrete struggles and demands that bring us together." http://www.grain.org/es/article/entries/4495-de-un-vistazo-y-muchas-aristas-economia-verde-o-lucro-legitimado

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